

RECEIVED

NOV 13 2001

OIPE

TECH CENTER 1600/2900

## RAW SEQUENCE LISTING

DATE: 09/19/2001

PATENT APPLICATION: US/09/084,691B

TIME: 12:56:19

Input Set : A:\Nihl.app

Output Set: N:\CRF3\09192001\I084691B.raw

ENTERED

3 <110> APPLICANT: Bukh, J.  
 4 Miller, R.H.  
 5 Purcell, R.H.  
 7 <120> TITLE OF INVENTION: Nucleotide and Deduced Amino Acid Sequences of the  
 8 Envelope 1 and Core Genes of Isolates of Hepatitis C  
 9 Virus and the use of Reagents Derived From These  
 10 Sequences in Diagnostic Methods and Vaccines  
 12 <130> FILE REFERENCE: 20264116US2  
 14 <140> CURRENT APPLICATION NUMBER: 09/084,691B  
 C--> 15 <141> CURRENT FILING DATE: 2001-08-30  
 17 <150> PRIOR APPLICATION NUMBER: 08/290,665  
 18 <151> PRIOR FILING DATE: 1994-08-15  
 20 <150> PRIOR APPLICATION NUMBER: 08/086,428  
 21 <151> PRIOR FILING DATE: 1993-06-29  
 23 <160> NUMBER OF SEQ ID NOS: 274  
 25 <170> SOFTWARE: PatentIn Ver. 2.1  
 27 <210> SEQ ID NO: 1  
 28 <211> LENGTH: 576  
 29 <212> TYPE: DNA  
 30 <213> ORGANISM: Homo sapiens  
 32 <220> FEATURE:  
 33 <223> OTHER INFORMATION: Individual Isolate: DK7  
 35 <400> SEQUENCE: 1  
 36 taccaagtgc gcaactccac ggggctttac catgtcacca atgattgccc taactcgagt 60  
 37 atcgtgtacg aggcggccga tgccatcctg cacactccgg ggtgtgtccc ttgcgttcgc 120  
 38 gagggtaacg tctcgagggtg ttgggtggcg atgaccccca cggtagggcac cagggatggc 180  
 39 aaactcccca cagcgcagct tcgacgtcac atcgatctgc tgcgcgggag tgccaccctc 240  
 40 tgttcggccc tctacgtggg ggacctgtgc gggctctgtct ttcttgtcgg tcaactgttt 300  
 41 accttctctc ccaggcgcca ctggacgacg caaggctgca attgttctat ctatcctggc 360  
 42 catataacgg gtcaccgcat ggcgtgggat atgatgatga actgggtccc taccacggcg 420  
 43 ttggttagtag ctcagctgct ccggatcccc caagccatct tggacatgat cgctgggtgct 480  
 44 cactggggag tcctggcggg catagcgtat ttttccatgg tggggaactg ggcgaaggtc 540  
 45 ctggtagtgc tgcgtctatt tgccggcgctc gacgcg 576  
 48 <210> SEQ ID NO: 2  
 49 <211> LENGTH: 576  
 50 <212> TYPE: DNA  
 51 <213> ORGANISM: Homo sapiens  
 53 <220> FEATURE:  
 54 <223> OTHER INFORMATION: Individual Isolate: DK9  
 56 <400> SEQUENCE: 2  
 57 taccaagtac gcaactcctc gggcctctac catgtcacca atgattgccc taactcgagt 60  
 58 attgtgtacg aggcggccga tgccatcctg cattctccag ggtgtgtccc ttgcgttcgc 120  
 59 gagggtaacg cctcgaaatg ttgggtggcg gtggccccc cggtagggcac cagggacggc 180  
 60 aagctccccg caacgcagct tcgacgtcac atcgatctgc ttgtcgggag cgccaccctc 240  
 61 tgcctcggccc tctatgtggg ggacttgtgc gggctctgtct tccttgtcgg ccaactgttc 300  
 62 accttctccc ccagacgcca ctggacaacg caagactgca actgttctat ctaccccggc 360  
 63 catattacgg gtcacgcgat ggcgtgggat atgatgatga actgggtccc tacagcagcg 420

## RAW SEQUENCE LISTING

DATE: 09/19/2001

PATENT APPLICATION: US/09/084,691B

TIME: 12:56:19

Input Set : A:\Nihl.app

Output Set: N:\CRF3\09192001\I084691B.raw

```

64 ctggtaatgg cgcagctgct caggatcccc caggccatct tggacatgat cgctggtgcc 480
65 cactggggag tcctagcggg catagcgtat ttctccatgg tggggaactg ggcgaaggtc 540
66 gtggtggtac tgttgctggt taccggcgctc gatgctg 576
69 <210> SEQ ID NO: 3
70 <211> LENGTH: 576
71 <212> TYPE: DNA
72 <213> ORGANISM: Homo sapiens
74 <220> FEATURE:
75 <223> OTHER INFORMATION: Individual Isolate: DR1
77 <400> SEQUENCE: 3
78 caccaagtgc gcaactctac agggctttac catgtcacca atgattgccc taattcgagt 60
79 attgtgtacg aggcggccga tgccatcctg cacgcgccgg ggtgtgtccc ttgcgttcgc 120
80 gagggtaacg cctcgagggtg ttgggtggcg gtgaccccca cgggtggccac cagggacggc 180
81 aaactcccca caacgcagct tcgacgtcac atcgacctgc ttgtcgggag cgccaccctc 240
82 tgctcggccc tctacgtggg ggacctgtgc gggctctgtc tccttgtcgg tcaactgttc 300
83 accttttctc ccaggcgcca ctggacaacg caagactgca attgttctat ctatcccggc 360
84 catataacgg gacaccgtat ggcattgggat atgatgatga actggtcccc tacgacagcg 420
85 ctggtaatgg ctgagctgct ccggatccca caagccatct tggacatgat cgctggagcc 480
86 cactggggag tcctagcggg catagcgtat ttctccatgg tggggaactg ggcgaaggtc 540
87 gtggtagtgc tgttgctggt tgccggcggt gatgctg 576
90 <210> SEQ ID NO: 4
91 <211> LENGTH: 576
92 <212> TYPE: DNA
93 <213> ORGANISM: Homo sapiens
95 <220> FEATURE:
96 <223> OTHER INFORMATION: Individual Isolate: DR4
98 <400> SEQUENCE: 4
99 caccaagtgc gcaactctac agggctttac catgtcacca atgattgccc taattcgagt 60
100 attgtgtacg aggcggccga tgccatcctg cacacgccgg ggtgtgtccc ttgcgttcgc 120
101 gagggtaaca cctcgagggtg ttgggtggcg gtgaccccca cgggtggccac cagggacggc 180
102 aaactcccca caacgcagct ccgacgtcac atcgacctgc ttgtcgggag cgccaccctc 240
103 tgctcggccc tctacgtggg ggacttgtgc gggctctgtc tccttgtcgg tcaactgttc 300
104 accttctctc ccaggcacca ctggacaacg caagactgca attgttccat ctatcccggc 360
105 catataacgg gccaccgcat ggcgtgggat atgatgatga actggtcccc tacgacagcg 420
106 ctggtagttag ctgagctgct ccggatccca caagccatct tggacatgat cgctggtgcc 480
107 cactggggag tcctagcggg catagcgtat ttctccatgg tggggaactg ggcgaaggtc 540
108 ctggtagtgc tgttgctggt tgccggcggt gatgctg 576
111 <210> SEQ ID NO: 5
112 <211> LENGTH: 576
113 <212> TYPE: DNA
114 <213> ORGANISM: Homo sapiens
116 <220> FEATURE:
117 <223> OTHER INFORMATION: Individual Isolate: S14
119 <400> SEQUENCE: 5
120 taccaagtgc gcaactccac ggggctttac catgttacca atgattgccc taactcgagt 60
121 attgtgtacg agacagctga tgctatccta cagctccgg gatgtgtccc ttgcgttcgt 120
122 gagggtaaca cctcgagggtg ttgggtggcg atgaccccca cgggtggccac cagggacggc 180
123 aaactcccg caacgcagct tcgacgttac atcgatctgc ttgtcgggag cgccaccctc 240
124 tgttcggccc tctacgtggg ggacttgtgc gggctctgtc tccttgtcgg tcagctgttt 300

```

## RAW SEQUENCE LISTING

DATE: 09/19/2001

PATENT APPLICATION: US/09/084,691B

TIME: 12:56:19

Input Set : A:\Nihl.app

Output Set: N:\CRF3\09192001\I084691B.raw

```

125 accttctctc ccaggcgccct ctggacgacg caagactgca attgttctat ctatcccggc 360
126 catataacgg gtcacgcgat ggcattggat atgatgatga actgggtccc tacgacggca 420
127 ctggtagtag ctacagctgct ccggatccca caagccatct tggatatgat cgctgggtgct 480
128 cactggggag tcctagcggg catagcgat ttctccatgg tgggaaactg ggcgaaggctc 540
129 ctagtgggtg tgctgctatt cgccggcggt gacgcg 576
132 <210> SEQ ID NO: 6
133 <211> LENGTH: 576
134 <212> TYPE: DNA
135 <213> ORGANISM: Homo sapiens
137 <220> FEATURE:
138 <223> OTHER INFORMATION: Individual Isolate: S18
140 <400> SEQUENCE: 6
141 taccaagtac gcaactccac gggcctttac catgtcacca atgactgccc taactcgagc 60
142 attgtgtacg agacggccga taccatccta cactctccgg ggtgtgtccc ttgcgttcgc 120
143 gagggtaacg cctcgagatg ttgggtgccc gtggccccc cagttgccac cagggacggc 180
144 aaactccccg caacgcagct tcgacgtcac atcgatctgc ttgttgggag cgccaccctc 240
145 tgctcgcccc tctatgtggg ggacctgtgc gggctgtct ttcttgtcag ccagctgttc 300
146 actatctccc ccaggcgcca ctggacaacg caagactgca actgttctat ctatcccggc 360
147 catataacgg gtcaccgat ggcattggat atgatgatga actgggtccc tacaacggcg 420
148 ttggtaatag ctacagctgct cagggtccc caagccgtct tggacatgat cgctgggtgcc 480
149 cactggggag tcctagcggg catagcgat ttctccatgg cggggaactg ggcgaaggctc 540
150 ctgctagtgc tgttgcgtgt tgccggcgct gatgcg 576
153 <210> SEQ ID NO: 7
154 <211> LENGTH: 576
155 <212> TYPE: DNA
156 <213> ORGANISM: Homo sapiens
158 <220> FEATURE:
159 <223> OTHER INFORMATION: Individual Isolate: SW1
161 <400> SEQUENCE: 7
162 taccaagtac gcaactcctc gggcctttac catgtcacca atgattgccc taactcgagt 60
163 attgtgtacg agacggccga tgccattcta cactctccag ggtgtgtccc ttgcgttcgc 120
164 gaggatggcg ccccgagtg ttgggtggcg gtggccccc cagtcgccac tagggacggc 180
165 aaactccctg caacgcagct tcgacgtcac atcgatctgc ttgtcggaag cgccaccctc 240
166 tgctcgcccc tctacgtggg ggaactgtgc gggctgtct ttctcgtcag tcaactgttc 300
167 acgttctccc ccaggcgcca ctggacaacg caagactgta actgttctat ctatcccggc 360
168 cacataacgg gtcaccgat ggcattggat atgatgatga actgggtccc cacaacagcg 420
169 ctggtagtag ctacagctgct caggatccc caagccgtct tggacatgat cgctgggtgcc 480
170 cactggggag tcctagcggg catagcgat ttctccatgg tggggaactg ggcgaaggctc 540
171 ctgatatgct tgttgcgtgt ttccggcgct gatgcg 576
174 <210> SEQ ID NO: 8
175 <211> LENGTH: 576
176 <212> TYPE: DNA
177 <213> ORGANISM: Homo sapiens
179 <220> FEATURE:
180 <223> OTHER INFORMATION: Individual Isolate: US11
182 <400> SEQUENCE: 8
183 taccaagtac gcaactccac ggggctttac catgtcacca atgattgccc taactcgagt 60
184 attgtgtacg aggcggccga tgccatcctg cacactccgg ggtgtgttcc ttgcgttcgc 120
185 gagggtaacg cttcgaggtg ttgggtggcg atgaccccc cgggtggccac cagggacggc 180

```

## RAW SEQUENCE LISTING

DATE: 09/19/2001

PATENT APPLICATION: US/09/084,691B

TIME: 12:56:19

Input Set : A:\Nihl.app

Output Set: N:\CRF3\09192001\I084691B.raw

```

186 aaactcccca caacgcaact tcgacgtcac atcgatctgc ttgtcgggag cgccaccctc 240
187 tgttcggccc tctacgtggg ggacctgtgc gggctctgtct ttcttgtcgg tcaactgttt 300
188 accttctctc ccagacgcca ctggacgacg cagggctgca attgttctat ctatcccggc 360
189 catataacgg gtcaccgcat ggcatgggat atgatgatga actgggtcccc tacggcgggc 420
190 ttggtggttag ctcagctgct ccggatccca caagccatct tggacatgat cgctgggtgct 480
191 cactgggggag tcctagcggg catagcgtat ttctccatgg tggggaactg ggcgaaggctc 540
192 ctggtagtgc tgctgctatt tgccggcgctc gacgcg 576

```

195 &lt;210&gt; SEQ ID NO: 9

196 &lt;211&gt; LENGTH: 576

197 &lt;212&gt; TYPE: DNA

198 &lt;213&gt; ORGANISM: Homo sapiens

200 &lt;220&gt; FEATURE:

201 &lt;223&gt; OTHER INFORMATION: Individual Isolate: D1

203 &lt;400&gt; SEQUENCE: 9

```

204 tatgaagtgc gcaacgtgtc cgggggtgtac catgtcacga acgactgttc caactcgagc 60
205 atttgttatg agacagcgga catgatcatg cacacccccg ggtgcgtgcc ctgcgttcgg 120
206 gaggacaact cctctcgctg ctgggtagcg ctcacccccca cgctcgcggc taggaatggc 180
207 aacgtcccca ctacggcgat acgacgccac gtcgatttgc tcgttggggc ggctgctttc 240
208 tgctccgcca tgtacgtggg ggatctctgc ggatctgttt tcctcatctc ccagctgttc 300
209 accctctcgc ctgcgggca tgagacggtg caggagtgtg attgctcaat ctatcccggc 360
210 cacgtgacag gtcaccgtat ggcttgggat atgatgatga actggtcacc tacaacagcc 420
211 ttagtggtat cgcagttact ccggatccca caagctgtca tggacatggt ggcggggggc 480
212 cactgggggg tcctggcggg cctgcgctac tattccatgg tggggaactg ggctaagggtt 540
213 ttgattgtga tgctactctt tgctggcggt gacggc 576

```

216 &lt;210&gt; SEQ ID NO: 10

217 &lt;211&gt; LENGTH: 576

218 &lt;212&gt; TYPE: DNA

219 &lt;213&gt; ORGANISM: Homo sapiens

221 &lt;220&gt; FEATURE:

222 &lt;223&gt; OTHER INFORMATION: Individual Isolate: D3

224 &lt;400&gt; SEQUENCE: 10

```

225 tatgaagtgc gcaacgtgtc cgggggtgtac caagtaccca atgactgttc caactcgagc 60
226 atcgtgtatg agacagcgga catgatcatg cacacccccg ggtgcgtgcc ctgcgttcgg 120
227 gaggacaact cctctcgctg ctgggtagcg ctcacccccca cgctcgcggc taggaatagc 180
228 agcgtcccca ctacgacaat acgacgccac gtcgatttgc tcgttggggc ggctgctttc 240
229 tgctccgcca tgtacgtggg ggatctttgc ggatctgttt tcctcgctc ccagctgttc 300
230 accttctcgc ctgcgggca tgagacagta caggaaatgta actgctcaat ctatcccggc 360
231 cacgtgacag gtcaccgcat ggcttgggat atgatgatga actggtcgcc tacagcagcc 420
232 ctagtgttat cgcagttact ccggatccca caagctgtcg tggacatggt ggcggggggc 480
233 cactgggggg tcctggcggg cctgcgctac tattccatgg tggggaactg ggctaagggtt 540
234 ttgattgtga tgctactctt tgctggcgctc gacggc 576

```

237 &lt;210&gt; SEQ ID NO: 11

238 &lt;211&gt; LENGTH: 576

239 &lt;212&gt; TYPE: DNA

240 &lt;213&gt; ORGANISM: Homo sapiens

242 &lt;220&gt; FEATURE:

243 &lt;223&gt; OTHER INFORMATION: Individual Isolate: DK1

245 &lt;400&gt; SEQUENCE: 11

```

246 tatgaagtgc gcaacgtgtc cgggggtgtac cacgtcacia acgactgttc caactcaagc 60

```

## RAW SEQUENCE LISTING

DATE: 09/19/2001

PATENT APPLICATION: US/09/084,691B

TIME: 12:56:19

Input Set : A:\Nihl.app

Output Set: N:\CRF3\09192001\I084691B.raw

```

247 atcgtgtatg aggcagtgga cgtgatcatg cataccccag ggtgcgtgcc ctgcgttcgg 120
248 gagaacaacc actcccgttg ctgggtagcg ctcacccccca cgctcgcggc caggaacgcc 180
249 agcatcccca ctacgacaat acgacgccat gtcgatttgc tcgttggggc ggctgctttc 240
250 tgctccgcta tgtacgtggg ggacctctgc ggatccgttt tcctcgtctc tcagctgttc 300
251 accttttcac ctgcgccgca tgagacagca caggactgca actgctcaat ctatcccggc 360
252 cacgtttcag gtcaccgcat ggcttgggat atgatgatga actggtcacc tacaacagcc 420
253 ctagtgctat cgcagttact ccgaatccca caagctgtcg tggacatggg ggcgggggcc 480
254 cactggggag tcctggcggg cctcgcctac tactccatgg cggggaactg ggccaaggtt 540
255 ttaattgtgt tgctactctt tgccggcggt gatggg 576

```

258 &lt;210&gt; SEQ ID NO: 12

259 &lt;211&gt; LENGTH: 576

260 &lt;212&gt; TYPE: DNA

261 &lt;213&gt; ORGANISM: Homo sapiens

263 &lt;220&gt; FEATURE:

264 &lt;223&gt; OTHER INFORMATION: Individual Isolate: HK3

266 &lt;400&gt; SEQUENCE: 12

```

267 tatgaagtgc gcaacgtgtc cgggatatac catgtcacga acgactgctc caactcaagc 60
268 gtcgtgtatg agacagcaga catgatcatg catacccctg gatgcgtgcc ctgcgtacgg 120
269 gagaacaact cctcccgttg ttgggtagcg ctcactccca cgctcgcggc caggaacgctc 180
270 agcgtcccca ccacgacaat acgacgtcac gtcgacttgc tcgttggggc ggctgccttc 240
271 tgctccgcta tgtacgtggg ggatctctgc ggatctgttt tccttgtctc ccagctgttc 300
272 accttctcgc ctgcgccgaca cgagacagta caggactgca actgctcaact ctatcccggc 360
273 cacgtatcag gtcaccgcat ggcttgggat atgatgatga actggtcacc tacagcagcc 420
274 ctagtggtgt cgcaattact ccggatcccg caagctgtcg tggacatggg ggcgggggcc 480
275 cactggggag tcctagcggg ccttgcctac tattccatgg tgggaaactg ggctaaggtt 540
276 ttgattgtga tgctactttt tgccggcggt gatggg 576

```

279 &lt;210&gt; SEQ ID NO: 13

280 &lt;211&gt; LENGTH: 576

281 &lt;212&gt; TYPE: DNA

282 &lt;213&gt; ORGANISM: Homo sapiens

284 &lt;220&gt; FEATURE:

285 &lt;223&gt; OTHER INFORMATION: Individual Isolate: HK4

287 &lt;400&gt; SEQUENCE: 13

```

288 catgaagtgc acaacgtatc cgggatctac catgtcacga acgactgctc caactcaagt 60
289 attgtgtatg aggcagcgga catgatcatg catacccccg ggtgcgtgcc ctgcgtccgg 120
290 gagaacaact cctcccgttg ctgggtagcg ctcactccca cgctcgcggc caggaacgcc 180
291 agcatcccca ctacgacaat acgacgccat gtcgacttgc tcgttggggc ggctgctttc 240
292 tgctccgcca tgtacgtggg agatctctgc ggatctgtct tcctcgtctc ccagttgttc 300
293 accttctcgc ctgcgccgca tgagacggtg caggactgca attgctcaat ctatcccggc 360
294 cacgtatcag gtcaccgcat ggcttgggat atgatgatga actggtcacc tacagcagcc 420
295 ctagtggtat cgcagttact ccgactccca caagctgtca tggacatggg ggcggggagcc 480
296 cactggggag tcctagcggg ccttgcctac tattccatgg tggggaactg ggccaaggtt 540
297 ttgattgtga tgctactctt tgccggcggt gacggg 576

```

300 &lt;210&gt; SEQ ID NO: 14

301 &lt;211&gt; LENGTH: 576

302 &lt;212&gt; TYPE: DNA

303 &lt;213&gt; ORGANISM: Homo sapiens

305 &lt;220&gt; FEATURE:

306 &lt;223&gt; OTHER INFORMATION: Individual Isolate: HK5

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

## VERIFICATION SUMMARY

DATE: 09/19/2001

PATENT APPLICATION: US/09/084,691B

TIME: 12:56:20

Input Set : A:\Nihl.app

Output Set: N:\CRF3\09192001\I084691B.raw

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:7397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:240  
L:7441 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:242  
L:7467 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:243  
L:7473 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:243  
L:7528 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:244  
L:7531 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:244  
L:7574 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:245  
L:7577 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:245  
L:7626 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:247  
L:7629 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:247  
L:7694 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:250  
L:7697 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:250  
L:7736 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:252  
L:7739 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:252  
L:7792 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:254  
L:7795 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:254  
L:7820 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:255  
L:7823 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:255  
L:7868 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:256  
L:7871 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:256  
L:7901 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:257  
L:7937 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:259  
L:7940 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:259  
L:7996 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:262  
L:7999 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:262  
L:8036 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:264  
L:8165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:265  
L:8177 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:265  
L:8180 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:265  
L:8183 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:265  
L:8189 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:265  
L:8192 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:265  
L:8195 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:265  
L:8198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:265  
L:8308 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:266  
L:8317 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:266  
L:8320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:266  
L:8323 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:266  
L:8326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:266  
L:8332 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:266  
L:8335 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:266  
L:8338 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:266  
L:8341 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:266  
L:8406 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:267  
L:8412 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:267  
L:8418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:267  
L:8424 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:267

## VERIFICATION SUMMARY

DATE: 09/19/2001

PATENT APPLICATION: US/09/084,691B

TIME: 12:56:20

Input Set : A:\Nihl.app

Output Set: N:\CRF3\09192001\I084691B.raw.

L:8430 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:267

L:8439 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:267

L:8495 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:268